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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,561	04/30/2001	Gregory P. Kochanski	Kochanski 57-4	2215

27997 7590 04/20/2004
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EXAMINER

MCFADDEN, SUSAN IRIS

ART UNIT	PAPER NUMBER
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2655

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DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,561

Applicant(s)

KOCHANSKI ET AL.

Examiner

Susan McFadden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24,27,28 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 22 is/are allowed.
- 6) ☒ Claim(s) 1-13,21,23,27 and 33 is/are rejected.
- 7) ☒ Claim(s) 14-19,24,28,31,32, and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-9,23,27, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Ladd et al. (6,493,673).

In regard to claims 1 and 2, Ladd et al. show in Figure 6, a system and method comprising the steps of: creating a set of tags, each tag controlling one or more aspects of one or more phenomena (characteristics of speech), arranging selected members of the set of tags in a desired sequence to produce phenomena as defined by the sequence of tags; and processing the tags in order to produce phenomena having the characteristics defined by the tags (col. 16, Abstract).

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In regard to claim 23, Ladd et al. show a text input interface for receiving text input (col. 1, In 28-34, Fig. 1, item 106), speech modeler operative to process the text inputs to produce speech having the prosodic characteristics specified by tags (col. 8-9, Fig. 6), and a speech output interface for producing the speech output (Fig. 1, item 102, col. 3, In 37-54).

In regard to claims 3,4, and 27, Ladd et al. show that the characteristics of speech include a prosody element that is constrained (col. 34, In 34-50).

In regard to claim 5, Ladd et al. show that each of the tags specifies an action to be taken and includes parameters defining attributes and associated values providing information about the action to be taken (col. 34, In 34-50).

In regard to claim 6, Ladd et al. show that each of the tags may include a parameter specifying the location at which the tag takes effect (col. 16).

In regard to claim 7, Ladd et al. show that each of the tags may include tags that establish settings that remain unchanged unless altered by a subsequent tag (col. 18, In 57-65, Input element).

In regard to claim 8, Ladd et al. show that the set of the tags include members which define the pitch behavior of speech over the course of a phrase (col. 34, Prosody, pitch rate).

In regard to claim 9, Ladd et al. show that the set of the tags includes tags defining accents that define the pitch behavior of local influences within a phrase (col. 6, In 28-30).

In regard to claim 33, Ladd et al. show that the set of the tags are placed to produce a word having prosody indicating the word needs confirmation (col. 29, ACK element).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ladd et al. (6,493,673).

In regard to claims 10-13, Ladd et al. show the system and method discussed above. Ladd et al. do not specifically show that the tags define phrase boundaries and its influence, that the tags define type, strength, and shape. The Examiner takes Official Notice that one of ordinary skill in the art would know these parameter values are common in speech systems. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to include these features because they provide a system or model that can be customized.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Tanenblatt (6,006,187) in view of Baba et al. (6,397,183).

In regard to claim 21, Tanenblatt show a method system for computer prosody interface comprising the steps of: selecting a body of training text, receiving speech representing reading of the training text by a speaker, analyzing the corpus to identify

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prosodic characteristics (Abstract, Fig. 2). The user can manually change the prosody. Tanenblatt do not specifically show the creation of a set of tags defining the identified prosodic characteristics of the training corpus. Baba et al. show a document reading system that contains tags for each attribute in reading aloud a document (corpus, col. 1, Fig. 6). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to include these features because they provide a system or model that can be customized.

Allowable Subject Matter

6. Claims 20 and 22 are allowed.

7. Claims 14-19,24, 28,31,32, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, Ladd et al. (6,493,673) show that it is well known to add tags to a system to specify output features. In regard to claims 14,17, and 20, the prior art of record does not show or suggest a step of processing the tags including establishing a phrase curve or pitch curve by creating and solving equations defined by tag which specify changes in pitch and tags which specify rates of changes in pitch. The prior art of record, Tanenblatt shows that it is well known to change prosody using a text interface system. In regard to claim 22, the prior art of record does not show or suggest a step of analyzing the placement of tags in the training text to develop a set of rules for placement of tags in the text and applying the rules to text for which text to


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speech processing is desired to place tags in the text in order to produce speech having desired prosodic information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan McFadden whose telephone number is 703-308-6693. The examiner can normally be reached on Monday-Friday, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan McFadden
Primary Examiner
Art Unit 2655

April 13, 2004